

IN THE CLAIMS:

Please cancel claims 1-42 without prejudice or disclaimer, and substitute new claims 43-84 therefor as follows:

Claims 1-42 (Cancelled).

43. (New) An electrical power transmission line comprising:

at least one electrical cable;

at least one shielding element made of at least one ferromagnetic material arranged in a radially outer position with respect to said at least one cable for shielding the magnetic field generated by said cable, said at least one shielding element comprising a base and a cover; and

at least one supporting element coupled to at least said base of the shielding element.

44. (New) The electrical power transmission line according to claim 43, wherein said at least one cable comprises three cables arranged according to a trefoil arrangement.

45. (New) The electrical power transmission line according to claim 43, wherein said line is placed underground.

46. (New) The electrical power transmission line according to claim 43, wherein said base and said cover are substantially continuous.

47. (New) The electrical power transmission line according to claim 43,
wherein said base comprises a bottom wall and a pair of side walls.

48. (New) The electrical power transmission line according to claim 47,
wherein said bottom wall and said pair of side walls are substantially flat.

49. (New) The electrical power transmission line according to claim 47,
wherein said side walls extend in a direction substantially perpendicular to said bottom
wall.

50. (New) The electrical power transmission line according to claim 47,
wherein said base further comprises a pair of flanges extending in a predetermined
direction from the end portions of the side walls of the base.

51. (New) The electrical power transmission line according to claim 50,
wherein said flanges extend outwardly from the end portions of the side walls of the
base.

52. (New) The electrical power transmission line according to claim 50,
wherein said flanges extend inwardly from the end portions of the side walls of the base.

53. (New) The electrical power transmission line according to claim 47, wherein said flanges extend in a direction substantially perpendicular to the end portions of the side walls of the base.

54. (New) The electrical power transmission line according to claim 43, wherein said cover is substantially continuous.

55. (New) The electrical power transmission line according to claim 54, wherein said cover comprises a main wall and a pair of flanges extending from the main wall in a predetermined direction.

56. (New) The electrical power transmission line according to claim 55, wherein said flanges extend in a direction substantially perpendicular to said main wall.

57. (New) The electrical power transmission line according to claim 43, wherein said base and said cover comprise walls having a thickness of about 0.20 mm to about 0.35 mm.

58. (New) The electrical power transmission line according to claim 43, wherein said base and said cover comprise respective sides superimposed for a portion of predetermined length in lateral direction.

59. (New) The electrical power transmission line according to claim 58, wherein a material having a permeability greater than air is interposed at the superimposed sides of the base and of the cover.

60. (New) The electrical power transmission line according to claim 43, wherein said base and said cover comprise walls having a rolling direction substantially perpendicular to the axis of said at least one cable.

61. (New) The electrical power transmission line according to claim 43, wherein said shielding element comprises a plurality of shielding modules arranged side by side, each of said shielding modules comprising a modular base and a modular cover.

62. (New) The electrical power transmission line according to claim 61, wherein said shielding modules are longitudinally superimposed for a portion of predetermined length.

63. (New) The electrical power transmission line according to claim 62, wherein said predetermined length is 25% to 100% of the width of said shielding element.

64. (New) The electrical power transmission line according to claim 61, further comprising a respective connecting element made of ferromagnetic material for connecting said shielding modules arranged side by side.

65. (New) The electrical power transmission line according to claim 61, wherein, in each of said shielding modules, said modular base and said modular cover are reciprocally staggered in longitudinal direction by a predetermined distance.

66. (New) The electrical power transmission line according to claim 61, wherein, in each of said shielding modules, said modular base is coupled to a respective supporting element.

67. (New) The electrical power transmission line according to claim 61, wherein at least two adjacent shielding modules extend along different directions, said shielding element further comprising a respective connecting element made of ferromagnetic material for connecting said at least two adjacent shielding modules.

68. (New) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material has a maximum value of relative magnetic permeability greater than about 20000.

69. (New) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material has a maximum value of relative magnetic permeability μ_{\max} of about 20000 to about 60000.

70. (New) The electrical power transmission line according to claim 43 or 67, wherein said ferromagnetic material is selected from the group of: grain oriented silicon steel, non-grain oriented silicon steel, Permalloy®, and Supermalloy®.

71. (New) The electrical power transmission line according to claim 70, wherein the silicon content is about 1% to about 5%.

72. (New) The electrical power transmission line according to claim 43, wherein said base is made of a first ferromagnetic material having a maximum value of relative magnetic permeability μ_{\max} greater than about 40, and wherein said cover is made of a second ferromagnetic material having a maximum value of relative magnetic permeability μ_{\max} greater than about 20.

73. (New) The electrical power transmission line according to claim 43, further comprising a supporting element coupled to said cover of the shielding element.

74. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is arranged in a radially outer position with respect to said at least one shielding element.

75. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is arranged in a radially inner position with respect to said at least one shielding element.

76. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one shielding element is interposed between a pair of supporting elements;

77. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is substantially flat.

78. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element comprises a respective wall having a thickness of about 1 to about 20 mm.

79. (New) The electrical power transmission line according to claim 43 or 73, wherein said at least one supporting element is made of an electrically non-conductive and non-ferromagnetic material.

80. (New) The electrical power transmission line according to claim 79, wherein said electrically non-conductive and non-ferromagnetic material is selected

from the group of: plastics materials, cement, terracotta, carbon fibres, glass fibres, and wood.

81. (New) The electrical power transmission line according to claim 80, wherein said plastics materials are selected from the group of: polyethylene (PE), low-density polyethylene (LPDE), medium-density polyethylene (MPDE), high-density polyethylene (HPDE), linear low-density polyethylene (LLPDE), polypropylene (PP), ethylene/propylene elastomer copolymers (EPM), ethylene/propylene/diene terpolymers (EPDM), natural rubber, butyl rubber, ethylene/vinyl copolymers, ethylene/acrylate copolymers, ethylene/ α -olefin thermoplastic copolymers, polystyrene, acrylonitrile/butadiene/styrene resins (ABS), halogenated polymers, polyurethane (PUR), polyamides, aromatic polyesters.

82. (New) The electrical power transmission line according to claim 43, wherein said shielding element further comprises a plurality of fixing means longitudinally arranged at predetermined distances from each other, said fixing means being intended to fix said cover on said base.

83. (New) The electrical power transmission line according to claim 82, wherein said fixing means are arranged in a plurality of pairs positioned along the sides of the shielding element at a reciprocal longitudinal distance of about 20 to about 100 cm.

84. (New) A method for shielding the magnetic field generated by an electrical power transmission line comprising at least one electrical cable, comprising the following steps of:

providing at least one shielding element made of at least one ferromagnetic material for shielding the magnetic field generated by at least one electrical cable, said at least one shielding element comprising a base and a cover;

coupling at least one supporting element to at least said base;

laying said at least one electrical cable into said base of the shielding element;

and

leaning said cover onto said base so as to substantially close said shielding element.